

## R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

### SHOWING UNDER 37 CFR §1.116

After a final rejection, an amendment touching the merits of the application may be admitted upon a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented (37 CFR §1.116(b)(3)). The amendments presented herein are necessary to rebut the new ground of rejection presented for the first time in the final Office Action, and respond to an invitation by the Examiner to amend claim 12 to overcome an objection. The amendments rebutting the new ground of rejection would not reasonably have been presented earlier because the combination of references forming the basis for the new ground of rejection of claims 1, 10 and 11 was first presented on the record in the final Office Action. As such, the amendments presented herein are believed to be compliant with the showing requirement under 37 CFR §1.116(b)(3) and Applicant respectfully requests that the amendments be admitted.

### SUPPORT FOR CLAIM AMENDMENTS

Support for the amendments to the claims can be found in the drawings as originally filed, for example, in FIGS. 2-6, and in

the specification as originally filed, for example, on page 3, lines 9-20, on page 4, lines 13-19, and on page 6, line 2 through page 12, line 14. As such, no new matter has been introduced.

#### **CLAIM OBJECTIONS**

The objection to claim 12 has been obviated by amendment and should be withdrawn.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. §103**

The rejection of claims 1-22 under 35 U.S.C. §103(a) as being unpatentable over Gryskiewicz et al. (U.S. Patent No. 6,392,712; herein after Gryskiewicz) in view of Boyce et al. (U.S. Patent No. 5,592,299; hereinafter Boyce) and in further view of Kim et al. (U.S. Patent No. 5,926,573; hereinafter Kim) has been obviated by amendment and should be withdrawn.

In contrast to the cited references, the presently claimed invention (claim 1) provides a method for decoding a bitstream including a step of storing the first field header and macroblock rows containing the encoded data for the plurality of vertical lines from a first field of the frame picture in a first field buffer and storing the second field header and macroblock rows containing the encoded data for the plurality of vertical lines from a second field of the frame picture in a second field buffer, where the encoded data for the plurality of vertical lines

contained in each macroblock row is unchanged. Claims 10 and 11 recite similar limitations. The combination of Gryskiewicz, Boyce and Kim does not teach or suggest storing the first field header and macroblock rows containing the encoded data for the plurality of vertical lines from a first field of the frame picture in a first field buffer and storing the second field header and macroblock rows containing the encoded data for the plurality of vertical lines from a second field of the frame picture in a second field buffer, where the encoded data for the plurality of vertical lines contained in each macroblock row is unchanged, as presently claimed. The combination of Gryskiewicz, Boyce and Kim does not teach or suggest each and every element of the presently claimed invention, as required to support a conclusion of obviousness under MPEP §2143. As such, the presently claimed invention is fully patentable over the cited references and the rejections should be withdrawn.

Specifically, each of the references Gryskiewicz, Boyce and Kim disclose changing the coding and/or the amount of video data from an input stream to an output stream. In particular, Gryskiewicz uses a decoder 102 to decode an interlaced video data stream 120 to obtain the unencoded odd and even video fields (124a and 124b). The unencoded odd and even video fields are combined into a progressive video frame 122. The progressive video frame 122 is mixed with another progressive video frame 130 and sent as

an interlaced analog video signal to a display (see FIGS. 1 and 2 and Abstract of Gryskiewicz). Thus, the encoded data for the plurality of vertical lines contained in the data stream 120 of Gryskiewicz is not unchanged as presently claimed.

Boyce does not cure the deficiencies of Gryskiewicz. Specifically, Boyce states:

The syntax parser receives a digital video data stream, e.g., an MPEG-2 data stream, as an input signal. The syntax parser 102 receives the video data stream which includes data representing, e.g., field pictures and/or frame pictures. The syntax parser 102 parses the received data stream to identify data representing different video frames and to generate as its output MPEG coding elements, e.g., macroblocks including DC and AC DCT coefficients. **The syntax parser 12 may be thought of as performing a partial variable length decode operation in that individual MPEG coding elements are identified in the variable length encoded data stream along with the video frame to which they correspond.** (column 5, lines 38-49 of Boyce).

Boyce further states:

**The data reduction circuit 110 receives the video data representing received video frames from the output of the syntax parser 102 and processes the video frame data to reduce the amount of data to produce a low resolution video frame which uses less data than the corresponding received video frame.** The low resolution video frames generated by the data reduction circuit 110 are supplied to the recording device 120 which records the low resolution video frames in trick play tape segments on a tape, i.e., tape segments from which data will be read during VTR trick playback operation, e.g., fast forward operation (column 5, lines 50-60 of Boyce).

Since Boyce states that the syntax parser 12 may be thought of as performing a partial variable length decode operation and the data reduction circuit 110 processes the video frame data to reduce the amount of data to produce a low resolution video frame which uses less data than the corresponding received video frame, it follows that the encoded data for the plurality of vertical lines contained in the MPEG-2 data stream of Boyce is not unchanged, as presently claimed.

Kim does not cure the deficiencies of Gryskiewicz and Boyce. Specifically, Kim discloses an apparatus for transforming the resolution of an image from a first image resolution to a second image resolution using operations in the spatial frequency domain (Abstract of Kim). The apparatus converts the bit-stream format which defines the first image and can be used to change the resolution of an MPEG encoded video signal by generating converted macroblocks from original macroblocks (Abstract of Kim). Since Kim discloses changing the resolution of an MPEG encoded video signal by generating converted macroblocks from original macroblocks, it follows that the encoded data for the plurality of vertical lines contained in the MPEG bit-stream of Kim is not unchanged, as presently claimed. Therefore, the combination of Gryskiewicz, Boyce and Kim does not teach or suggest each and every element of the presently claimed invention, as required to support a conclusion of obviousness under MPEP §2143. As such, the presently

claimed invention is fully patentable over the cited references and the rejections should be withdrawn.

Furthermore, modification of Gryskiewicz, Boyce and Kim to cause the encoded data for the plurality of vertical lines contained in an input MPEG bit-stream to remain unchanged would make the inventions of Gryskiewicz, Boyce and Kim unsuitable for their intended purpose. Therefore, Gryskiewicz, Boyce and Kim do not provide the suggestion or motivation for such modification. Therefore, the combination of Gryskiewicz, Boyce and Kim does not teach or suggest each and every element of the presently claimed invention, as required to support a conclusion of obviousness under MPEP §2143. As such, the presently claimed invention is fully patentable over the cited references and the rejections should be withdrawn.

Claims 2-9 and 12-22 depend, directly or indirectly, from either claim 1 or claim 11 which are believed to be allowable. As such, the presently claimed invention is fully patentable over the cited reference and the rejection should be withdrawn.

Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.


The Examiner is respectfully invited to call the Applicant's representative between the hours of 9 a.m. and 5 p.m. ET at 586-498-0670 should it be deemed beneficial to further

advance prosecution of the application.

If any additional fees are due, please charge Deposit  
Account No. 12-2252.

Respectfully submitted,

CHRISTOPHER P. MAIORANA, P.C.

  
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Robert M. Miller  
Registration No. 42,892

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c/o Lloyd Sadler  
LSI Corporation

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